

NORTHERN CORRIDOR TRANSIT AND TRANSPORT COORDINATION AUTHORITY

AUTORITÉ DE COORDINATION DE TRANSIT ET DE TRANSPORT DU CORRIDOR NORD

THE NORTHERN DIGEST



- For an Efficient, Smart and Green Corridor

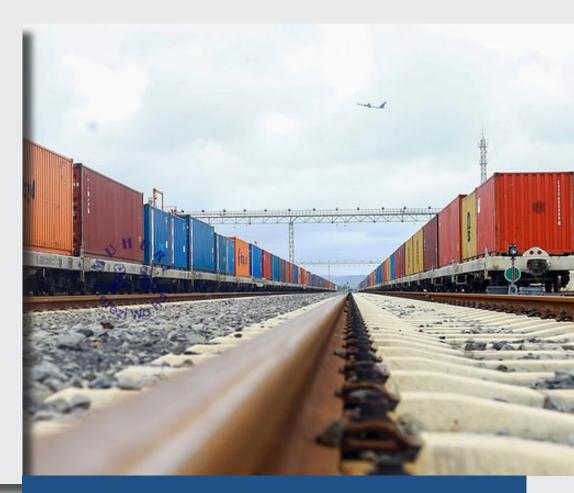
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ENHANCED DASHBOARD WITH CUSTOMIZED GIS TO IMPROVE PERFORMANCE MONITORING

The Northern Corridor Transit and Transport Coordination Authority (NCTTCA), in collaboration with TradeMark East Africa (TMEA), is upgrading the Northern Corridor Transport Observatory toolkit to improve the efficiency in reporting.

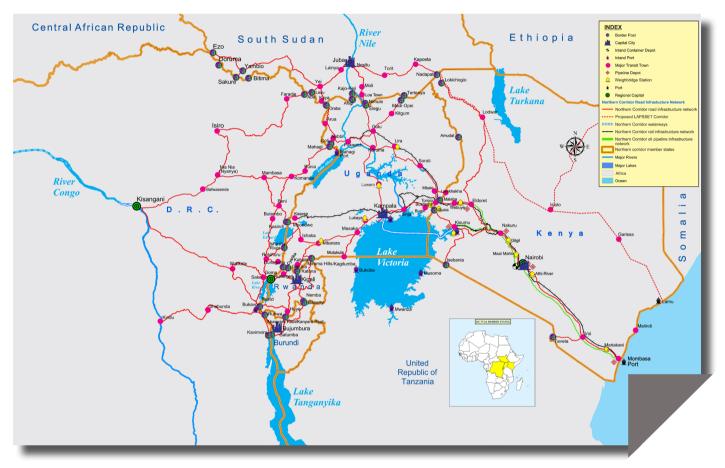
The expanded toolkit will include a data collection tool running on mobile devices and a data warehouse consisting of data storage and extract, transform, load (ETL) to blend data from multiple sources and a database for processed data. The enhanced dashboard with customized Geographic Information System (GIS) will have the ability to spatially feature selected indicators on the map at various nodes along the corridor including the different indicator components. Key features also include data mining and business intelligence capabilities aimed at supporting decision-making processes for different corridor participants. The tool will also incorporate a universal data exchange mechanism to automate data exchange from the sources as well as reports and recommendations modules as the repository for all reports and publications on the Corridor performance.



The new system is expected to track and report performance on the expanded infrastructure from the development of the Standard Gauge Railway in Kenya and Inland Container Depots (ICDs) in Kenya, Rwanda and Uganda.

Flexibility and adaptability of the system enables it to accommodate data changes from different sources, future extensions in terms of indicators to be monitored, new data sources and any new features on data analytics and reporting. corridor are all within the anticipated outcomes of the enhancement.

As a monitoring tool, the Transport Observatory platform currently measures over 40 indicators on the performance along the corridor. It tracks the indicators using raw data collected from the stakeholders in all the Member States of Burundi, DR Congo, Kenya Rwanda, South Sudan and Uganda. The information collected provides a clear



Northern Corridor Road Network: Upgraded system will be flexible and adaptable to accommodate data changes.

In addition to improved efficiency, the robust system is expected to greatly support the commitment by the Northern Corridor Secretariat to transform the Corridor into an efficient, smart and green corridor through continued advocacy for full automation of systems and processes. Interfacing of systems, infrastructure developments and improvement, simplification of procedures and processes to reduce barriers to transport and trade, harmonisation of transport and trade-related policies and infrastructure to ensure a resilient and developmental corridor, and implementation of the Green Freight Programme that seeks to make the Northern Corridor an environmentally safe transit picture on various indicators, enabling to identify the bottlenecks that need to be resolved to improve on the efficiency and sequentially improving in the trade and operations.

The current toolkit has four components; Dashboard, Indicators, GIS and the Documents platforms. The upgrade of the system seeks to automate data exchange processes, transform to intuitive platforms through new information delivery components, and improve on the database design by adopting the latest data management technologies.

C VID-19 IMPACT AND WAY FORWARD



Omae Nyarandi, Executive Secretary, NCTTCA

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The COVID-19 pandemic has had profound effects on the transport sector and indeed the entire logistics chain. The pandemic has generally affected businesses in the Northern Corridor region and exposed some gaps and vulnerability of the existing trade facilitation policies; a situation that was sudden and unforeseen.

Many challenges are being experienced in facilitating cross border trade due to unpreparedness and lack of existing trans-boundary disaster management strategies.

The abrupt nature of the pandemic, coupled with the absence of tailored strategies has affected and continued to affect the performance at the Port of Mombasa and the Northern Corridor at large.

There is therefore a need for a detailed assessment of the regional level of vulnerability so that national and trans-boundary disaster mitigation measures can be put in place. The Northern Member States are therefore called on to adopt harmonized disaster response mechanism to safeguard the Transport Corridor, share early warning systems intelligence, build capacity of personnel involved in the Transport Logistics Chain, as well as revisit existing national and regional disaster response policies that affect trade, transport and all

other related infrastructure. "

A COLLECTIVE STAKEHOLDERS' EFFORT TO REDUCE GREENHOUSE GAS (GHG) EMISSIONS

n collaboration with the Northern Corridor Transit and Transport Coordination Authority (NCTTCA) and Central Corridor Transit Transport Facilitation Agency (CCTTFA), TradeMark East Africa (TMEA) commissioned a study dubbed "Greenhouse Gas Inventory for the Northern and Central Corridors", which aimed to identify total Greenhouse Gas (GHG) emissions along the main corridor routes and explore some climate change mitigation projects to be prioritized in an effort to reduce the GHG emissions' by the transport sector in both corridors.

According to the report, GHG emissions of the Northern Corridor are 1.73 MMtCO₂e (million metric tons of carbon dioxide equivalent) while those of the Central Corridors are 1.23 MMtCO₂e.

The study on the GHG offers guidance on how much effort might be required to produce definitive answers for the reduction of GHG emissions. It proposes reduction of GHG emissions intensity by 20% and 15 % by 2030 for the Central and Northern Corridors respectively.



In this endeavour, the report emphasises collective stakeholders' effort and individual commitments by corridor users as key to reducing the GHG emissions. The report further give some broad climate change mitigation interventions to enable the corridors achieve the proposed CO₂ emission intensity reduction in grams per tonne-km.

Mbale- Elegu. Along the Central Corridor, the report recommends Morogoro – Isaka, Dar es Salaam – Morogoro, Isaka – Rusumo, Isaka – Mwanza and Isaka – Kabanga for improvement.



Partner States in both Northern and Central Corridors are urged to embrace modal shift from road to railways and waterways transport modes.

Implementing infrastructure projects

As noted by the report, the majority of goods in both corridors are transported through roads. Due to high GHG emission intensity of roads in comparison to railways and inland waterways, the report recommends a modal shift to railways and inland waterways for the consideration of the Member States.

GHG emissions of freight corridor are often determined as a function of fuel efficiency, distance travelled, and weight transported; and are affected by the condition of the roads. Poor road condition, the report reveals, impacts on the speed of the vehicle, which increases fuel consumption and ultimately increases GHG emissions.

The Secretariats for both of the corridors are advocating for rehabilitation of major highways to ensure road quality in accordance to the International Roughness Index (IRI). Recommended routes for improving IRI along the Northern Corridor are Mombasa-Nairobi, Nairobi-Malaba, Nairobi-Busia, Busitema-Kampala, Luwero-Elegu, Luwero-Goli, Mbale-Goli, Mubende- Kasindi, and

Capacity building and institutional mechanisms

There is a need to reduce empty return trips in both corridors, which, according to the report, constituted a significant portion of the estimated total GHG emissions of the return journeys. The report noted that, in empty trips as well as in the loaded trips, GHG is emitted. However, in the empty trips, fuel is consumed, and GHG emitted without carrying out any useful work. In both corridors, the report shows that exports make only 14% of the total trade resulting to a higher proportion of empty return trips, with nearly 30% of trucks loaded and 70% returning empty. In realising this, the report recommends initiatives like route optimisation, reverse logistics for efficiency and cost-effectiveness, and truck aggregator model for both the two corridors and truck operators.

Through the development of a green leadership programme for truck operators and fleet owners, the report suggests voluntary climate targets of improvement in fuel efficiency and reduction in pollutants. The targets, the report proposes, will be defined for different types of trucks, truck ages, and depending on other truck characteristics as



may be identified. Those that will achieve the set climate targets can be incentivised by providing concessional toll rates, reduction in road tax, and priority clearance in port or customs area among others to encourage regular vehicle maintenance and periodic pollution control tests.

The report, in addition has recommended capacity building for truck drivers on eco-driving practices



Along the Northern and Central Corridors, approximately 70% constitute empty return trips.

like gentle acceleration, maintaining a steady speed, anticipating traffic, avoiding high-speed driving, and coasting to reduce fuel consumption and significantly reduce vehicle emissions.

from infrastructure improvement Apart and capacity building aimed at reducing GHG emissions, the report also proposes vehicle efficiency improvement projects. Engine losses and aerodynamic drag, the report says, create a drain on the fuel efficiency of the trucks. The report proposes that the two corridors should collaborate with national automobile research institutes in different partner States and truck manufacturers to standardise aerodynamic features of the trucks. The aerodynamic additions to the trucks, in totality, reduce the strain on fuel efficiency and consequently the GHG emissions.

The report concluded that the adoption of the proposals and guidance from the corridors can significantly help the countries achieve GHG emission reduction targets for the transport sector in the region.

TWELVE PARKING YARDS IDENTIFIED FOR UPGRADING TO RSS IN KENYA

Multi-stakeholder team lead by the Northern Corridor Secretariat has identified twelve parking facilities along the Northern Corridor in Kenya that were found to have amenities that may be upgraded into Roadside Stations (RSS).

The exercise came as a result of a directive by the Northern Corridor Council of Ministers in response to the lack of adequate facilities for rest, medical care, maintenance, parking, and sanitation along the corridor routes; especially during the COVID-19 pandemic. The absence of adequate facilities has seen high numbers of accidents within the Northern Corridor region due to fatigue and growing incidences of diseases such as HIV/AIDs, Ebola, and now COVID-19 spreading across borders.

The identified parking yards with facilities similar to the Northern Corridor RSS designs that could be upgraded included Shell and Premium Energy Bonje; Maungu Lorry Park by Taita Taveta County Government; Sparkle Centre located in Mtito Andei; Darussalam Hotel and parking facility located in Mtito Andei; Delamere Holding Shop Point in Naivasha; Shell Salgaa at Salgaa; and Uasin Gishu Lorry Park by the County Government of Uasin Gishu locatedat Jua Kali Other proposed parking yards viable for upgrade to RSS but were at conception stage were KeNHA land in Sultan Hamud; Shell and Premium Energy in Mai Mahiu; Mundika Trailer Park - Busia County Government Project; Malaba Park by Busia



The private sector has invested in facilities similar to RSS though uncoordinated.

County Government; and Kikopey yard between Nakuru and Gilgil.

Since its inception in 2014, the implementation of the Northern Corridor RSS program has been ongoing despite the slow pace. The momentum in developing the required regulatory frameworks for investing in RSS by the public sector has been declining, however, the private sector has invested in facilities similar to RSS; though uncoordinated. A study carried out at the inception of the program



had identified 141 locations for RSS out of which 67 were considered as priority locations. Out of the 67 priority locations identified along the Northern Corridor, 22 were in Kenya. The study also provided financial projections and their financial models for their development.

National Governments through their agencies should support Private Sector players and County Governments in the realization of the RSS projects by developing regulations on RSS, providing incentives to investors and providing funding for the projects.

The Northern Corridor Secretariat had developed the RSS Regional Guidelines to ensure common designs for RSS are kept along the Corridor; as such, templates are available to be used by the Members States in developing their respective National Guidelines.

The multi-disciplinary survey team tasked the Northern Corridor Secretariat to follow up with potential investors the development and upgrading of their parking yards to suit the Northern Corridor recommended RSS standards. The team also urged KeNHA and County Governments to enhance their collaboration in developing RSS facilities and ensuring that road designs take into consideration the proposed RSS facilities and standards. In Kenya, KeNHA is expected to take the lead and hire consultancy services to develop the RSS National Guidelines.

The survey also recommended a Task Force and Steering Committee comprising members from the Ministry of EAC and Regional Development, the Ministry of Transport, Infrastructure, Housing and Urban Development, Ministry of Land, Ministry of Health, Kenya National Highways Authority (KeNHA), Public-Private Partnership (PPP) Unit, National Transport and Safety Authority (NTSA), Private Sector as well as County Government representatives to be revived to spearhead the process of developing the RSS legal framework.

As a way forward, Kenya Revenue Authority promised to facilitate the accreditation and geofencing processes of the facilities that were identified during the survey to serve as RSS along the Northern Corridor.



The Northern Corridor Transport Observatory has continued to facilitate increased development and improved performance of the Port of Mombasa and the entire Northern Corridor route. Emerging as an effort to address the specific challenges faced by landlocked developing countries in East Africa, the Northern Corridor Transport Observatory has greatly revolutionised trade facilitation. With an initial aim of reducing the disadvantages associated with the remoteness of the countries including longer importing or exporting times and relatively higher costs, the Transport Observatory has evolved to become an effective and focused way to address both intra-regional and international trade. Its scope has also evolved from a pure transit facilitation perspective to a broader perspective encompassing regional trade facilitation but still hinged on offering an efficient logistics system to promote trade and development.



Data-driven trade facilitation generated in form of weekly, monthly, quarterly and bi-annual reports by the Northern Corridor Transport Observatory from raw data provided by Stakeholders has significantly contributed to the enhanced efficiency of the port and development of the port and corridor infrastructure leading to increased throughput. The wealth of information recorded, and tools, instruments and methods applied have informed the establishment of other Transport Observatories including the Central Corridor. (HSWIM) improving the weighbridge crossing time. Currently, 23 OSBPs have been identified across the region with 15 OSBPs already established. Business processes have also been significantly automated and the quality of road conditions along the Corridor improved.

Also, in support of the MPNCCC, the Transport Observatory has continued to enhance the efficiency, effectiveness, reliability and global competitiveness of the Port of Mombasa and the Northern Corridor. Under the Charter, safety has been promoted through identification of safety indicators that



enabled NCTTCA to map out black spots along the Corridor and lobby institutions in Member States to consider ways of improving road safety.

The Transport Observatory informed the need of Northern Corridor Public-Private Partnership Committee Meetings under which programmes like RSS are being pushed. The Observatory has become part of the Northern Corridor Integration

The Transport Observatory also encompass regional trade facilitation but still hinged on offering an efficient logistics system to promote trade and development.

Additionally, informed policies and decision from liable data have enabled the improvement of infrastructure and reduction of Non-Tariff Barriers to transport and trade which has led to enhanced efficiency of the Northern Corridor.

Over the years, the recommendations made through the Transport Observatory coupled with the commitment and role of the Member States has ushered tremendous gains for the corridor including enhanced cooperation among the Member States; establishment of and monitoring the implementation of the Mombasa Port and Northern Corridor Community Charter (MPNCCC); monitoring the implementation of the Vehicle Load Control (VLC) Charter and its Communication Strategy; establishment of Sustainable Green Freight Transport Programme; establishment of the Roadside Stations Programme; development of Regional Electronic Cargo Tracking System; establishment One Stop Border Posts (OSBPs) initiatives; and the implementation of COMESA Trade Facilitation Instruments, among others.

More specifically, the region has witnessed enhanced efficiency of the Port of Mombasa and infrastructure developments at the port, faster clearance of goods with the implementation of the Single Customs Territory (SCT) across the region, and installation of the High-Speed Weigh in Motion Projects (NCIP) informing high-level policymakers on the performance of the Corridor through the Single Customs Territory (SCT).

The Observatory informs development partners like the World Bank; the African Development Bank (AfDB); United Nations Economic Commission for Africa (UNECA); Japan International Cooperation Agency (JICA); TMEA; United Nations Conference on Trade and Development (UNCTAD); among others on the impact of their interventions.

Under the COVID-19 pandemic, the Transport Observatory has continued to be a vital performance monitoring and reporting tool. In spite of the achievements, the Observatory has also revealed how much transit transport and trade has been affected by the pandemic.

Data from the Quarterly Report show that Mombasa Port throughput for the period January to September 2020 stood at 22.3 million metric tonnes (MT), a marginal decline by 0.4 million MT in 2020 when compared to the same period in 2019 which registered cumulative throughput of 22.7 million MT. MPNCCC targets to attain port throughput of 35.90 million tons by December 2020. Imports accounted for 82% while exports accounted for only 13%, transhipment constituted 6% and restows 0.3% percent of the total throughput. The share of exports increased by 10% in September 2020 compared to January 2020 revealing a hard-hit import trade.

Since the onset of the pandemic, movement of goods has been slowing down on the Northern Corridor routes. For instance, transit time from



Mombasa to Malaba and Busia rose to 228 hours and 402 hours in September 2020 from 116 hours and 98 hours respectively in January 2020. The pandemic and containment measures stifled domestic activity and disrupted trade and transportation with different entry and exit points still experiencing traffic congestion. The output from the Transport Observatory underscores the importance of Transport Observatories in informing the process of development of resilience in the transport corridors.

With the process of upgrading its monitoring and reporting toolkit currently ongoing, the Transport Observatory envisions robust, flexible



Further, intraregional trade for exports has had an adverse effect on export earnings due to weak demand in these markets. According to UNCTAD's new Global Trade Update, Global trade recorded a 5% drop in the third quarter of 2020 compared with the same period in 2019. However, some of the containment measures have since been relaxed to slowly open the economies to growth. and adaptable monitoring and reporting system for all stakeholders. With increased automation, the benefits of the Transport Observatory for the Member States cannot be overstated.



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Government of Ireland

Rialtas na hÉireann



NORWEGIAN MINISTRY OF FOREIGN AFFAIRS



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Ministry of Foreign Affairs of the Netherlands



The Permanent Secretariat 1196 Links Road, Nyali P.O. Box 34068-80118 Mombasa, Kenya



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Telephone +254 729 923574 +254 733 532485

E-mail: ttca@ttcanc.org Website: www.ttcanc.org